

CLAIM OR CLAIMS

WHAT IS CLAIMED IS:

1. An apparatus for creating a protocol stack comprising:

5 a protocol layer with a standardized interface; and
 an instance for the administration of the protocol stack that contains
the protocol layer.

10 2. The apparatus as recited in claim 1 wherein the protocol layer comprises a
description file in which a characteristic of the protocol layer is described.

15 3. The apparatus as recited in claim 2 further comprising means for linking
the description files of components of the protocol layer with each other.

20 4. The apparatus as recited in claim 1 wherein the instance comprises:
 a local emulation manager that is assigned to the protocol layer; and
 a global emulation manager that is linked to the local emulation
manager.

25 5. The apparatus as recited in claim wherein the protocol layer has a Service
Access Point, with the Service Access Point having an input and/or an output
to another Service Access Point.

30 6. The apparatus as recited in claim 4 wherein the protocol layer comprises

an input and an output to connect with the local emulation manager.

7. The apparatus as recited in claim 1 wherein the protocol layer is configured to be connected with at least two higher protocol layers and at least two lower protocol layers.

8. The apparatus as recited in claim 2 wherein the characteristic comprises:
a description of a Service Access Point as a list of primitives that may be exchanged via the Service Access Point; and
parameters of the protocol layer; and
actions of the protocol layer.

9. The apparatus as recited in claim 8 wherein the primitives are shown as standardized structures and standardized coding.

10. The apparatus as recited in claim 8 further comprising a communication function for giving the Service Access Point the same form as the instance.

11. The apparatus as recited in claim 1 further comprising an interaction element via which a user interacts with the protocol layer.

12. The apparatus as recited in claim 11 further comprising a script interpreter that is incorporated by the interaction element into the protocol stack so that the user acts on the protocol stack.

13. The apparatus as recited in claim 1 further comprising a graphical user interface for putting together the protocol stack.

14. The apparatus as recited in claim 13 wherein protocol-layer-specific
5 information is made available via the graphical user interface.

15. The apparatus as recited in claim 14 wherein the protocol-layer-specific information comprises:

adjustable and constant parameters of the protocol layer; and
10 actions of the protocol layer, the parameters and actions being modifiable by the user.

16. A method of creating a protocol stack comprising the steps of:

making available a protocol layer with a standardized interface;
15 randomly compiling the protocol stack containing the protocol layer;

and

making available an instance for the administration of the protocol stack.

17. An apparatus for creating a protocol stack comprising:

a plurality of local emulation managers, each local emulation manager being coupled to a protocol layer emulation with the protocol layer emulation having a standardized interface;

a global emulation manager linked to the local emulation managers to

form an administration instance; and

means for interacting with the administration instance to provide administrative commands for loading and connecting elements including the protocol layer emulations to create the protocol stack.